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EXAMINER				
USTARIS, JOSEPH G				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/902,185

Applicant(s)

ALSAFADI ET AL.

Examiner

JOSEPH G. USTARIS

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-7, 9, 10 and 12-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, 9, 10 and 12-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 4-7, 9, 10, 12-19 have been considered but are moot in view of the new ground(s) of rejection.

Furthermore, applicant argues that the examiner has brought in teachings from Fontana based on mere conclusory statements. However, the examiner respectfully disagrees. The examiner has shown that it is well known in the art to use the UML format when communicating/developing with clients (See Fontana col. 6 line 53 - col. 7 line 5). Furthermore, the examiner has provided proper motivation from Fontana. Fontana disclose that the use of UML format would solve the problem of the inability to exchange information between tools by enabling systems to easily exchange information between devices thereby ensuring greater compatibility and offering the capability of using object oriented programming (See Fontana col. 2 lines 50-58 and col. 6 line 66 – col. 7 line 12). Therefore, one of ordinary skill in the art would recognize the benefits of using the UML format based on the facts provided by Fontana.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 12, 13, 15, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi (US006681395B1) in view of Fontana et al. (US006167564A).

Regarding claim 1, Nishi discloses a method for processing content-related information (e.g. EPG data) for delivery to a processing device configured to support an electronic program guide of a first type (See Figs. 1 and 3; col. 6 lines 10-16; terminal 4 for a 4:3 aspect ratio display screen), the method comprising:

configuring a reference information object model (See Figs. 3-7, e.g. 162) such that XML documents or other content-related information from diverse information sources (See Figs. 1 and 9; wherein the EPG data contains other content-related information (e.g. details) from diverse information sources (e.g. the sources of the content)) can be generated therefrom in a consistent manner so as to be suitable for processing by a wide variety of different electronic program guide applications for use with the content-related information (See Figs. 3-7; col. 6 lines 10-16; the system uses templates to build guides in a consistent manner to be processed by a wide variety of different EPG application (e.g. 4:3 EPG or a 16:9 EPG)),

the reference information object model (See Figs. 3-7, e.g. 162) comprising a plurality of directly or indirectly interrelated classes (See Fig. 7, 171, 172, 181, 182) each having at least one specified property (See col. 6 lines 24-30 and col. 7 lines 1-31), the reference information object model defining a set of requirements (See Fig. 4, template 162 sets requirements for the location of other embedded templates and the type of information to be displayed), the set of requirements relating to at least one type of content (See Figs. 1-7; e.g. broadcast content),

wherein the reference information object model is generated utilizing an iterative process (See Fig. 13; col. 12 lines 13-42; the process repeats itself every time the user wishes to display an EPG) in which an initial version of the model is generated using a first set of data specifications (e.g. a user wishing to view a table-format EPG will cause the system load templates (162) appropriate for a table-format EPG) (See Figs. 3 and 13; col. 12 lines 13-42 and col. 13 lines 58-60), and at least one subsequent version of the model is generated from the initial version using at least a second set of data specifications (e.g. a user who now wishes to view a category-oriented EPG will cause the system load templates (166) appropriate for a category-oriented EPG) (See Figs. 11 and 13; col. 12 lines 13-42 and col. 13 lines 58-60); and

configuring at least a portion of the content-related information (See Figs. 8-10) for consistency with corresponding portions of the reference information model when the content-related information satisfies the set of requirements (e.g. the types of information from the EPG data are placed in the appropriate templates) (See Figs. 3-7; col. 5 lines 30-39), the portion of the content-related information so configured thereby being selectively extractable (e.g. the system selectively extracts EPG data based on the templates used) by the electronic program guide of the first type (e.g. a 4:3 EPG) and at least a second electronic program guide of a second type different than the first type (e.g. a 16:9 EPG) (See col. 6 lines 10-16 and col. 12 lines 23-29) in accordance with a specified semantic and syntactic consensus (wherein the electronic program guide selectively extracts only the information that the user wants and displays the

information following/agreeing with the meaning and syntax of the templates) (See col. 9-11);

wherein at least some of said content related information which is accessed by said first (e.g. 4:3 EPG) and second types (e.g. 16:9 EPG) of electronic program guide is present in the initial version of the model and the at least one subsequent version of the model (e.g. two program showing within the same time span and are of the same category would be present in both the table-format EPG and the category-oriented EPG) (See Fig. 3; e.g. "Sport News" and "Financial News" are shown in the table-format EPG. The same programs would be shown on the "News" category-oriented EPG) and wherein said initial version (e.g. table-format EPG) of the model may be changed to the subsequent version (e.g. category-oriented EPG) of the model to allow the same to be accessed by the second type of electronic programme guide (e.g. a 16:9 display EPG) without the content related information itself changing between said versions of the model (e.g. the EPG data is not changed when the user accesses the various guide temples using either a 4:3 EPG or 16:9 EPG) (See Figs. 3-13; col. 6 lines 10-16 and col. 12 lines 23-29).

However, Nishi does not explicitly disclose configuring the reference information object model in accordance with a unified modeling language format.

Nishi discloses that the templates are developed using XML codes (See col. 4 lines 56-63). Fontana et al. (Fontana) discloses various development tools used to develop various interfaces. Fontana utilizes the UML format when communicating/developing with client or "configuring in accordance with a unified

modeling language format" (See col. 6 line 53 - col. 7 line 5). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Nishi to configure the reference information object model in accordance with a unified modeling language format, as taught by Fontana, in order to be able to easily exchange information between devices thereby ensuring greater compatibility and offering the capability of using object oriented programming (See col. 2 lines 50-58 and col. 6 line 66 – col. 7 line 12).

Regarding claim 4, wherein the specified property utilizes one or more attributes, relationships and states (See Nishi col. 6 lines 24-60, e.g. aspect ratio).

Regarding claim 12, the at least one subsequent version of the model is periodically updated in accordance with one or more sets of updated specifications (See Nishi Figs. 7 and 13; e.g. when the display period has ended the system updates the guides using the corresponding EPG data thereby entering new data within the templates/specifications thereby providing "updated specifications").

Regarding claim 13, the program guide receives its information from EPG data or "content-related information", where the original format of the EPG data (e.g. first format) is not complaint to the templates using hypertext description language format or "reference information model", therefore the EPG data is converted or "transformed" into a hypertext description language format (See Nishi Figs. 8 and 9; col. 5 lines 30-39 and col. 9-11).

Regarding claim 15, wherein the transforming utilizes an extensible mark-up language style sheet generated at least in part utilizing the content-related information

in the first format and the reference information model (See Nishi Figs. 8 and 9; col. 4 lines 43-63, col. 5 lines 30-39, and col. 9-11).

Claim 17 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. Furthermore, Nishi discloses that the method discussed in claim 1 can be embodied as a subscriber terminal or "processor apparatus" (See Nishi Fig. 1, element 4). In addition, Nishi discloses a processor and memory coupled to the processor (See Nishi Fig. 1, controller 45 and memory 46).

Claim 18 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. Furthermore, Nishi discloses that the method discussed in claim 1 can be embodied as a subscriber terminal or "processor apparatus" (See Nishi Fig. 1, element 4). In addition, Nishi discloses a processor and memory coupled to the processor (See Nishi Fig. 1, controller 45 and memory 46).

Claim 19 contains the limitations of claim 1 (where the system is operated by executing "one or more software programs stored on a computer-readable storage medium" (See Nishi Fig. 2)) and is analyzed as previously discussed with respect to that claim.

4. Claims 5-7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi (US006681395B1) in view of Fontana et al. (US006167564A) as applied to claim 1 above, and further in view of Knowles et al. (US006505348B1).

Regarding claim 5, Nishi in view of Fontana does not explicitly disclose that the reference information model comprises a plurality of elements including one or more

enumeration elements and one or more of the classes, a given one of the plurality of classes being associated with at least a subset of the enumeration elements and at least a subset of the remaining classes.

Knowles et al. (Knowles) discloses an interactive electronic program guide system. Knowles discloses that the IPGs can be customized, wherein the format of the IPG can be changed. Based on the guide customizations, the format of the IPG can provide additional information or "plurality of elements" such as movies or "classes" and a list of episodes or "enumeration elements". Furthermore, the list of episodes or "enumeration elements" is associated with the movies or "classes", while the movies are also "associated" with other types of programs such as sports or "plurality of classes" (See Knowles Fig. 9 and Fig. 10). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Nishi and Fontana to have the reference information model comprise a plurality of elements including one or more enumeration elements and one or more of the classes, a given one of the plurality of classes being associated with at least a subset of the enumeration elements and at least a subset of the remaining classes, as taught by Knowles, in order to expand the capabilities of the program guide by providing different types of information to the users.

Claim 6 contains the limitations of claim 5 (wherein the movies provide different programs or "program class element" or a list of movies or "remaining class elements", (See Knowles Fig. 10)) and is analyzed as previously discussed with respect to that claim.

Regarding claim 7, the IPG disclosed by Knowles further presents the Themes or “classes” as objects that can be seen from a screen, wherein some of the objects are listed or “oriented” in alphabetic order. Furthermore, the Themes or “classes” contain additional information such as channel numbers or “attributes”. The whole screen of the IPG contains different information elements or “structures” that enable the user to browse efficiently (See Knowles Fig. 10).

Regarding claim 9, the IPGs each could have their own configuration based on the guide customizations or “reference information model” thus producing different layouts or “schema” for each IPG (See Knowles column 7 lines 34-45), with the information being retrieved from the EPG data or “content-related information” as discussed in claim 1.

Claim 10 contains the limitations of claim 9 (wherein the IPGs or program guides could have their own different layouts or “plurality of different schema” and be read or “processed” by the terminal as discussed in claim 1) and is analyzed as previously discussed with respect to that claim.

5. Claim 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi (US006681395B1) in view of Fontana et al. (US006167564A) as applied to claim 1 above, and further in view of Humpleman et al. (US006243707B1).

Regarding claim 14, Nishi in view of Fontana does not explicitly disclose that the content-related information in the first format comprises one or more documents for use with an electronic program guide of a type not based on the reference information

model, and further, wherein the documents are converted to the second format so as to be utilizable at least by the electronic program guide of the first type.

Humpleman et al. (Humpleman) discloses an EPG system. Humpleman discloses an original generic EPG, that includes records or "documents", that is dependent on the DBSS and will inherently be read by the EPG program of the DSS-NIU or "electronic program guide of a type not based on the reference information model". Alternatively, the original generic EPG is converted into the HTML/XML standard program format or "second format" to produce a HTML/XML network program guide to be read by the session managers or "electronic program guide of the first type" on the network (See Humpleman Fig. 1; column 22 line 66 – column 23 line 17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Nishi in view of Fontana to have the content-related information in the first format comprises one or more documents for use with an electronic program guide of a type not based on the reference information model, and further, wherein the documents are converted to the second format so as to be utilizable at least by the electronic program guide of the first type, as taught by Humpleman, in order to provide guide data to multiple guide systems on a network (See col. 22 lines 40-65).

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi (US006681395B1) in view of Fontana et al. (US006167564A) and Kido (US 20020073081A1).

Claim 16 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim.

However, Nishi in view of Fontana does not disclose where the EPG data or "content-related information" is in an extensible mark-up language (XML).

Kido discloses a method where an EPG is generated and distributed to the client (See Fig. 8). The generated EPG or EPG data or "content-related information" is produced using HTML or XML (See paragraph 0138). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the EPG data disclosed by Nishi in view of Fontana to be in an extensible mark-up language, as taught by Kido, in order to be able to easily exchange information between devices thereby ensuring greater compatibility and offering the capability of using object oriented programming (See Fontana col. 2 lines 50-58 and col. 6 line 66 – col. 7 line 12).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH G. USTARIS whose telephone number is (571)272-7383. The examiner can normally be reached on M-F 7:30-5 PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph G Ustaris/
Primary Examiner, Art Unit 2424